



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/606,764	06/27/2003	Hung-Tien Yen	3722-0151P	5515

2292 7590 12/13/2005

BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH, VA 22040-0747

EXAMINER

PHAM, VAN T

ART UNIT	PAPER NUMBER
----------	--------------

2656

DATE MAILED: 12/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/606,764	Applicant(s) YEN, HUNG-TIEN	
	Examiner VAN T. PHAM	Art Unit 2656	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

21

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-2 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Tomoyuki (JP11-073648).

Regarding claim 1, see Figs. 7, 8, discloses a reproduction method for reproducing BCA (Burst Cutting Area) data for optical discs, comprising the steps of: generating a defect signal as a BCA signal by detecting an RF (Radio Frequency) signal of the BCA (see Fig. 7 elements 16, 17); generating a BCA data bit stream by sampling the BCA signal according to a sampling clock (see Fig.11 elements 18, 19 and paragraph [0018]-[0019]); and decoding the BCA data bit stream to generate BCA data (see Figs. 7 (19) , 8 (19b) and [0022]-[0023]).

Regarding claim 2, see Figs. 7, 8, discloses the method according to claim 1, wherein the decoding step comprises the step of demodulating channel bit, detecting sync, checking error-correction-code, and checking error-detection-code the BCA data bit stream to generate the BCA data (see Figs. 7(18,19, 22), 8 (19b) and [[0017-[0023]]).

Regarding claim 4, see Figs. 5, 7, 8 discloses a BCA data reproduction apparatus for optical discs, the reproduction apparatus comprising: a defect detector for receiving an RF (Radio Frequency) signal and generating a defect signal according to the RF signal, the defect signal serving as a BCA signal (see Fig. 7, elements 16-18); a sampling unit for sampling the BCA signal according to a sampling clock to generate a BCA data bit stream (see Fig. 7, 8

Art Unit: 2656

elements 18-19, [0018-[0019]]; and a decoder for decoding to generate BCA data according to the BCA data bit stream (see Figs. 7 (19), 8 (19b) and [0022]-[0023]).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tomoyuki (JP11-073648) as applied to claims 1 and 4 above, in view of the admitted prior art.

Regarding claim 3, see Figs. 7, 8, discloses the method according to claim 1, Tomoyuki discloses the amplifier 16 (Fig. 11 element 16) which using the RF signal to generates the defect signal (BCA signal). However, Tomoyuki does not disclose that the amplifier can compare a ripple amplitude signal of the RF signal of BCA to the ripple amplitude signal after being low-pass filtered.

The admitted prior art, Fig. 3 discloses the step of generating the defect signal is to compare a ripple amplitude signal of the RF signal of BCA to the ripple amplitude signal after being low-pass filtered (see Fig. 3 and [0006]).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide a signal amplifier that is generating the defect signal is to compare a ripple amplitude signal of the RF signal of BCA to the ripple amplitude signal after being low-pass filtered in Hatanaka as suggested by the admitted art, the motivation being in

Art Unit: 2656

order to extract the desired BCA information from the RF signal (see the admitted art [0006], lines 4-5).

5. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tomoyuki (JP11-073648) as applied to claim 4 above, in view of the Hou et al. (US 2004/0066723).

Tomoyuki, see Figs. 7, 8 discloses the BCA detector 19 samples data based on channel bit clock and is generating the BCA detection channel bit. However, Tomoyuki does not disclose the frequency divider for receiving a reference clock and generating the sampling clock.

Hou, see Fig. 3, 31 (Prior art), discloses the divider for receiving a reference clock and generating the sampling clock.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide a divider in as suggested by Hou, the motivation being in order to make sure that the disk rotating speed meets a predefined value (see Hou [0003]).

Cited References

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The cited references relate to a reproduce a BCA data (Tomoyuki JP 11-073648); a sampling clock generator for BCA data decoding (Hou et al. US 2004/0066723).


7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to VAN T. PHAM whose telephone number is 571-272-7590. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa Nguyen can be reached on 571-272-7579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2656

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

VP


HOA T. NGUYEN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600
12/8/05